A *review by the* **Federal Reserve Bank of Chicago**

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Business Conditions

1955 April

Contents

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THE Trend OF BUSINESS

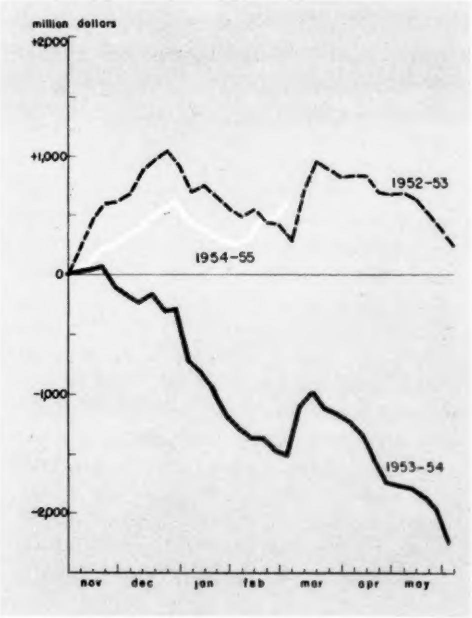
General business recovery has now proceeded to the point where many broad measures of activity are beginning to rival their previous highs. Total national output of goods and services, which rose 6 billion dollars in the fourth quarter from the 356 billion summer low, is now close to the 370 billion peak rate of mid-1953. Industrial production has climbed 8 per cent since last summer and is less than 3 per cent below its all-time high. Steel mills are operating at better than 92 per cent of capacity, as against a low of 63 per cent in July and August of last year. Automobile output for March is scheduled at a new monthly high, exceeding the previous record set in June 1950. Construction expenditures, at record levels since mid-1954, were 13 per cent higher than a year ago in January and February.

The vigor of the business pickup owes much to rising levels of consumer spending for goods, services and new housing. New housing starts, strengthening since the spring of 1954, have recently been running one-fourth higher than a year ago. Retail sales, paced by sales of new model cars, spurted sharply upward in December and have held close to the higher level so far this year, after adjustment for seasonal changes.

Preliminary findings of the *1955 Survey of Consumer Finances,* just released, lend support to the view that a faster retail sales pace will generally be maintained this year. Consumers are decidedly more optimistic about the general business situation than a year ago, and a significantly larger proportion anticipate income gains this year than was the case in early 1954. Specific plans to buy furniture, appliances and other such durables are generally more numerous than a year ago, while intentions to purchase houses show a sizable increase as compared with the *1954 Survey.* The proportion of families intending to buy new cars this year is about the same as in early 1954, however, suggesting that the year-to-year sales gains of a third and more shown in recent months are not likely to be sustained.

Business activity is also likely to be buttressed by some inventory rebuilding in the months ahead. Largely as the result of increased sales, seasonally adjusted inventories declined further in December and failed to rise

Business loans at city banks show stronger trend in recent months



in January. At that time, total business stocks were 6 per cent or 4.7 billion dollars below the September 1953 peak, while business sales had recovered to within 2 per cent of their previous high.

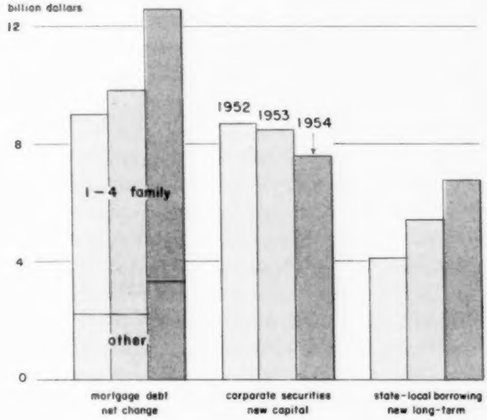
The gradually declining trend in capital expenditures has been one of the weaker elements in the business situation up till now. Earlier expectations generally were for a continued decline this year. A recent SEC—Commerce Department survey of business intentions to invest in new plant and equipment, however, indicates that this trend will be reversed in the second quarter. After seasonal adjustment, such outlays are expected to increase 5 per cent over the first-quarter rate, following a 10 per cent drop from the mid-1953 peak. Larger outlays by public utilities and various types of commercial businesses account for most of the gain. Preliminary indications are that capital spending for the year will also be slightly larger than in 1954, suggesting that the higher second-quarter rate will at least be maintained in the latter half of this year.

The improvement in business since last fall has been accompanied by a general strengthening in demands for credit. Short-term loan requirements of consumers, business firms, farmers and investors have risen substantially in recent months, while mortgage debt has climbed at a record rate and new security offerings of corporations and state and local governments have continued in large volume. Reflecting the increased vigor of credit demands, interest rates have firmed since last summer.

Business loans at city banks have increased substantially in recent weeks for this time of year. During February, the increase amounted to 310 million dollars, as compared with *declines* of 360 million in the same month of 1954 and 280 million in 1953. The change in movement, as compared with a year earlier, began about the middle of November. Since then, business loans have expanded even more than during the comparable months of the 1952-53 business boom.

Sales finance borrowings have been especially

Long-term credit requirements boosted by mortgages, state-local financing



important contributors to the stronger loan trend as retail and wholesale automobile credit needs have grown and companies have reduced borrowings in the commercial paper market. Although less spectacular, the pattern of borrowing by most other business lines has also been relatively stronger than a year ago.

Consumer instalment credit has jumped sharply in the last several months, following a period of relative stability during most of 1954. Total indebtedness, seasonally adjusted, rose 600 million dollars in December and January, as compared with an increase of only 30 million dollars in the same months a year before. Most of the gain was accounted for by sharp increases in credit extensions for the purchase of automobiles, although other consumer goods credit has also advanced more modestly in recent months. Record sales of new cars and continued strength in used car, furniture and appliance demand since January suggest that further substantial gains in instalment credit are in prospect in the months immediately ahead.

Mortgage credit has been extended in record amounts since mid-1954, reflecting a growing volume of residential and commercial construction and the increasing importance of low

equity FHA and VA home loans. In the last half of the year, the estimated increase in total mortgage debt amounted to 7.4 billion dollars, half again more than in the same period of 1953. Institutional holders expanded their loan portfolios by 6.2 billion as against 4.1 billion in the latter half of 1953. The continued large volume of construction expenditures, further increases in the rate of housing starts over the winter and heavy forward commitments to acquire future mortgages made by many lenders indicate that mortgage debt will show further sharp increases in the months ahead.

Borrowing by state and local governments in 1954 reached a new high of 10.3 billion dollars. This was nearly a fourth more than in 1953 and twice the volume reported for years as recent as 1950 and 1951.

Preliminary estimates place the volume of municipal long-term security issues in the first quarter of this year at about 1.1 billion dollars, somewhat less than in the comparable period of 1954. Thousands of localities still are confronted with pressing needs for schools, improved roads and additional community facilities. Whether total state-local borrowings will come up to the 1954 volume this year, however, would seem to depend upon the deliberations of state legislatures now in session and the disposition of several large toll road issues.

Corporate securities issued for new money last year amounted to 7 billion dollars, down 12 per cent from the 1953 volume. Public offerings in the first quarter, however, are tentatively estimated at 1.3 billion dollars, substantially more than in the same months last year. The increase is entirely accounted for by the 330 million dollar General Motors stock issue and the 250 million debenture of General Motors Acceptance Corporation. Present prospects for the year as a whole are that security offerings will not differ greatly from the 1954 volume.

Financing terms boost housing

Since the fall of 1953, residential construction activity has shown a striking and persistent growth. Private housing starts, seasonally adjusted, have climbed at an accelerating pace from an annual rate of about 1 million units in mid-1953 to a rate of around 1.4 million units in recent months. Construction outlays for work currently being done are at a seasonally adjusted rate of nearly 16 billion dollars, one-third more than a year ago and well above any earlier level.

This expansion has been the more striking in that it began in the face of the 1953-54 general business downturn, has persisted despite a sharp drop in net new family formation over the past several years and has come on top of the 8 million nonfarm dwellings already constructed in the postwar period.

Improved products and merchandising techniques by builders are partly responsible for the renewed vigor in residential building. The trend toward larger houses, three bedrooms and family living areas, fully equipped kitchens and more contemporary architecture are features of this development. In addition, underlying support for new housing markets comes from the movement to the suburbs as well as strong desires for better living accommodations on the part of many families.

One principal explanation for the upsurge in building, however, is the pronounced easing in the availability and terms of mortgage credit which has occurred since mid-1953. Beginning in the fall of that year, institutional lenders became increasingly willing to channel additional funds into the mortgage market, as the

demand for credit from alternative outlets slackened and monetary authorities shifted to a more expansive policy. Since then, credit terms have grown progressively easier, partly as the result of competitive pressure among lenders and partly through legislation and administrative mandate.

The impact of these developments has been especially pronounced in the case of Government insured and guaranteed loans. In limited supply until the latter part of 1953, funds for VA mortgages have been forthcoming in large volume, lenders' requirements as to down payments have dropped to 10 per cent, 5 per cent and, in a significant proportion of cases, nothing, and maturities have generally lengthened to 25 and 30 years. Effective last October, the Housing Act of 1954 similarly relaxed terms on FHA mortgages, although down payment requirements are still held to 5 per cent or more. As a result, the proportion of housing starts carrying VA and FHA financing has increased spectacularly, from 41 per cent a year earlier to 56 per cent in the fourth quarter of 1954. In fact, the gain in housing starts over the past year has been entirely accounted for by units carrying Government-backed financing.

Ready availability of funds on easy terms has encouraged builders to go ahead with large-scale programs, while lower down payments and longer maturities have had the effect of reducing out-of-pocket and monthly costs of buying new homes so far as family budgets are concerned. Thus, it seems clear that the easier credit terms have opened up new market demands which builders are in the process of supplying. The question is—how long will these additional sources of demand sustain the present rate of home building?

Apparently no end to the boom is yet in sight. Builders' inventories of completed houses are very low and, considering sales already made for spring and summer delivery, the industry probably now has a net backlog of orders. Moreover, intentions to purchase houses this year are significantly more numerous than in early 1954, according to the *1955 Survey of Consumer Finances.* Relatively pessimistic forecasts project this year's private starts at around 1954's 1.2 million total. More optimistic expectations are for a new record of 1.4 or even 1.5 million units this year. Certainly, current prospects point to a very high level of building, although starts may not hold at the recent near-record rates throughout the year.

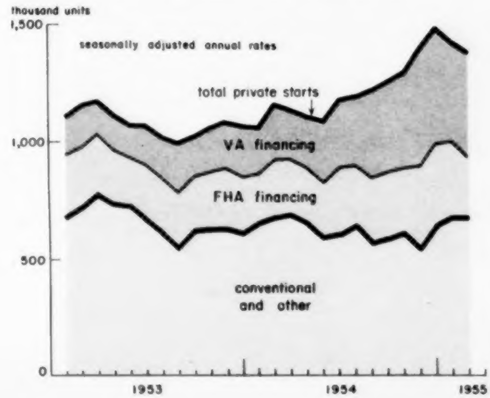
Optimistic in the Midwest

A recent survey of builders and lenders in a dozen of the larger Seventh District centers indicates that plans and expectations are broadly optimistic. Virtually all firms in all cities plan to do at least as much and, in many cases, more business than last year.

Among lenders the optimism is especially pronounced. The majority anticipate sizable increases in loan volume this year, and the remainder expect to maintain closings about equal to last year's high level. Over-all, Midwest lenders seem to be anticipating an increase in mortgage disbursements of around 15 per cent as compared with 1954.

Builders' plans, on the other hand, are more varied. This is to be expected since builders, unlike lenders, often make large year-to-year changes in their programs with respect to such things as type of house, price range and devel-

Private home-building activity soars, with VA financed starts accounting for most of the gain



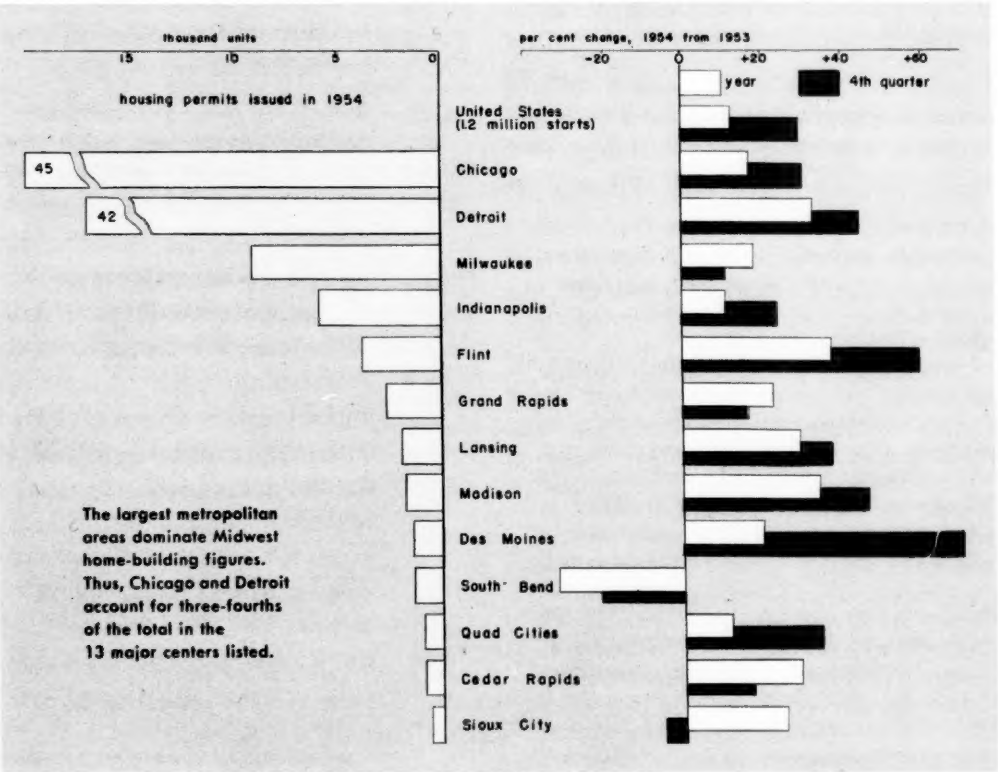
opment of new land for subdividing. In general, however, builders seem somewhat less optimistic than lenders at this time. Summing up the plans of all the builders contacted, the expected increase in housing starts over last year appears to be in the 5-10 per cent range.

In the Chicago area, many of the large builders contacted have programmed sizable increases for this year, and virtually all plan to build at least as many units as in 1954. In Detroit, on the other hand, the bulk of the project builders are planning for a repeat of their 1954 performance, which was one-third higher than the year before. A few Detroit builders have scheduled moderate increases, however, while none presently anticipate large reductions. This same pattern of high-level stability to moderate gains is also reflected by builders' expectations in Milwaukee, Indianapolis and most of the smaller centers covered in the survey.

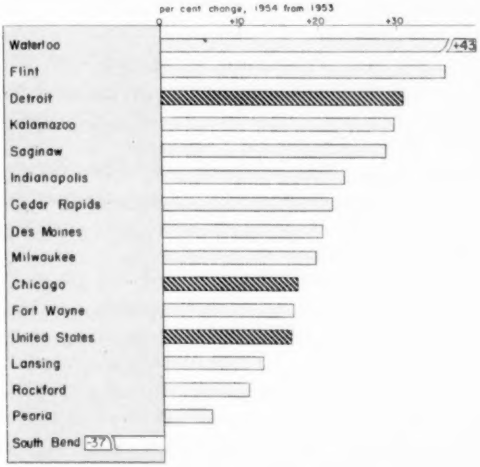
Terms eased in '54

Both builders and lenders report that the terms on which VA loans are available here eased significantly last spring but have changed little since then. Except in the Detroit area, however, there do not appear to be many VA loans requiring no down payment. More typical terms in Chicago, Milwaukee and even in Detroit are 5 and 10 per cent down with 30 year maturities. Even these terms are not so widely available in the smaller District centers. Although some 30 year loans are being made

Private housing permits rose sharply last year in most areas



Home mortgage loan volume showed widespread gains last year among District centers



outside the big cities, 25 year maturities are much more common. Moreover, down payment requirements on VA loans in the smaller centers are seldom less than 10 per cent.

The reduction in down payment requirements on FHA loans permitted by the new Housing Act have been widely accepted by lenders in all cities. Lenders have been less willing to adopt the longer maturities now permitted on FHA loans. The 30 year FHA loan is fairly common on new project houses in Detroit and Chicago and is available in limited volume in most other District centers. Many institutions hold to an absolute limit of 25 years, however, and some more conservative lenders seldom go beyond 20 year maturities. Moreover, 30 year loans on used houses are a distinct exception in all Midwest cities.

Conventional loan terms have changed much less than FHA and VA requirements over the past year. Many lenders have eased down payment requirements slightly, but the amount of cash needed still ranges from 20 to 50 per cent of purchase price, with most lenders requiring 30 per cent or more. In a number of District cities, interest rates on prime conventional loans also weakened in 1954—usually from 5 to 4¾ or 4½ per cent.

The most important potential relaxation in the conventional loan field which has occurred in some time, however, results from the permission recently granted Federally chartered savings and loan associations to extend maturities from 20 to 25 years. So far, the longer maturity has been adopted only by larger associations in Detroit and Chicago, but a few associations in other District centers also stand ready to make the 25 year loan, at least on a selective basis. Savings and loan associations are by far the biggest single group of mortgage lenders in most Midwest centers, accounting for up to around 60 per cent of home mortgage closings in the Chicago area. Consequently, growing acceptance of the 25 year maturity would have a substantial impact upon the typical conventional loan terms available in local mortgage markets.

Needed—lots of money

It takes a lot of mortgage money to finance the current large volume of residential construction, especially considering the easier down payment requirements which have developed over the past year. Mortgage loan closings of $20,000 or less increased 16 per cent in the nation and even more sharply in most District centers last year. Total mortgage debt on one to four family properties rose 9.3 billion dollars as against 7.6 billion in 1953.

Consequently, it seems reasonable to question whether a substantially larger volume of funds for mortgage investment will be forthcoming this year without upward pressure on the prevailing liberal terms. If the recent pickup in business activity is maintained, there is a good chance that demands for credit from other business, consumer and government sources will intensify. In addition, the improved business tone suggests that monetary policy will be less expansive than was the case last year. Finally, most institutional lenders are planning on an increased savings inflow to finance the anticipated gain in loan closings. Retail sales have risen substantially in recent months, how-

ever, and if the higher volume is maintained, savings balances may grow less vigorously than in the recent past.

Indeed, a tendency toward tightening on commitments for future loans has already been noted by some lenders and project builders, especially in the largest District cities. This firming has occurred partly in the form of slightly larger discounts for FHA and VA loan commitments and partly through a moderate stiffening in some lenders' requirements as to credit terms. In addition, some mortgage companies report that quotas for future loan commitments have been reduced by their principals —largely life insurance companies and mutual savings banks.

A longer-run problem is the potential specter of overbuilding. As the postwar period of high-level building continues, the nation's housing inventory is growing not only in numbers but also in newness. More than 22 per cent of the nation's total nonfarm dwellings are now postwar in origin. Moreover, formation of new households—an important source of demand for additional dwellings—has dropped substantially in recent years. By the year ended last April 1, the net annual increase in households had dropped back to only about half the 1954 volume of housing starts.

In most communities, however, there are few signs of overbuilding as yet. Rental vacancies reportedly have increased, but in many areas are not even up to the 5 per cent commonly considered "normal." Rents have just recently stabilized, following a long period of increase. More important to home builders, used house prices have not weakened appreciably over the past year. Lenders in District centers generally characterize the used market as active and relatively firm. If anything, markets have strengthened in recent months in response to somewhat easier credit terms and better business generally. So long as prices and activity in these competitive forms of housing hold high, an abrupt and serious shrinkage in builders' market potentials seems unlikely to occur.

Better roads—impact on industry

About 4.2 billion dollars will be spent on new road construction during 1955, an amount equal to more than one-tenth of all construction. This year's expenditure will be about 20 per cent higher than 1954 and nearly double the total of five years ago. Under existing programs these outlays would rise further to an annual rate of about 5 billion dollars in the years ahead.

But a much more rapid acceleration of the nation's road building outlay is now under consideration. A bill has been introduced to increase sharply Federal highway grants to the states, and the President's special committee headed by General Lucius Clay recently recommended that steps be taken to develop a 10 year program involving expenditures of 101 billion dollars.

The magnitude of the current and prospective highway spending dwarfs other nonmilitary government efforts. A mere 1 billion dollars, for example, is scheduled to be spent on the St. Lawrence Seaway over a period of five years, and a like amount has been suggested as the Federal contribution to an expanded school building program.

Picking up speed

There is little doubt that almost any conceivable expansion in road building can be accomplished given time and money. Only the desire for very rapid acceleration from present levels

calls into question the ability of governmental bodies and industry to provide the planning, equipment and supplies needed to do the job.

Studies prepared for the Clay Committee assume a 2 billion dollar rise in each of the first three years of an expanded program and a 1 billion gain in the fourth year to an 11 billion dollar annual rate. This amounts to a jump of 50 per cent in the first year and a rise to two and one-half times the current rate by 1959. Such a rapid growth would affect not only the industries directly concerned but, in addition, would provide a strong stimulus to the entire economy.

Last year new highway building employed the direct labor of about a quarter of a million persons and the indirect services of an equal number. Road projects utilized 300,000 pieces of equipment and consumed 50 million barrels of cement, 360 million tons of aggregates, 1.6 million tons of steel, 58 million gallons of petroleum products and vast amounts of other materials. A stepped-up program, of course, would require large increases in these as well as other items.

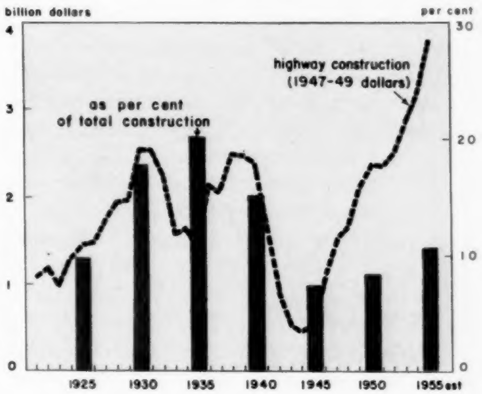
Engineering—a bottleneck?

At the start of 1955, there was a backlog of about 16 billion dollars in highway plans in various stages of development including 10 billion of toll roads. If all of these programs were pushed to completion, they would provide four years of work at current rates. Nevertheless, it is contemplated that an accelerated road program would meet an obstacle in the design stage.

Over 30,000 engineers are believed to be engaged in highway planning and design at the present time. A rapid expansion of this staff will be difficult. Only 4,000 civil engineers are being graduated annually by our colleges, and only a portion of this number can be attracted to highway work. However, a greater reliance upon subprofessional help and consulting firms, together with increased use of standard designs, would economize on the time of trained engineers.

It has been estimated that the 6,000 contractors doing road work could undertake 50 per cent more work in the first year of an expanded program and 100 per cent more in the third year. Despite rising volume in recent years, road building has become increasingly competitive as evidenced by bidding on individual contracts. An explanation of this development can be found in the nature of the construction industry.

Road building in steep climb from wartime low



The relative ease of entry into road building for new firms or those doing comparable work plus the ability of existing firms to add men and equipment to handle larger jobs has served to sharpen competition. Moreover, there is a strong incentive to keep a given organization intact even if it means bidding on certain jobs at prices which merely cover out-of-pocket costs.

Man power—a seasonal problem

Unlike most segments of construction, road building applies mass production techniques which have reduced labor requirements over the years. Highway contractors own one-third of all construction machinery by value although they do only about one-tenth of all construction work. The importance of machinery is illustrated by the fact that the number of pieces of major equipment and trucks owned by highway

contractors far exceeds their maximum number of workers.

Because of continued improvements in the use of man power, the number of on-site workers probably will not rise as fast as construction volume. Nevertheless, the Bureau of Labor Statistics estimates that the average of 220,000 workers directly employed on new highway construction during 1954 would rise to about 350,000 at an annual construction rate of 8 billion dollars and 500,000 at an 11 billion rate.

These monthly averages do not indicate the peak road gang needs, however. Employment runs about 75 per cent higher in the third quarter of the year than in the first quarter. In the summer of 1954, over 280,000 workers were employed by highway contractors—about 30 per cent more than the average for the year. This would mean that average employment of 500,000 would involve about 650,000 during the height of the season, and only about 360,000 in the winter months.

The additional workers needed for road work could doubtless be attracted from a labor force of well over 60 million persons. Over 40 per cent of highway workers are classified as unskilled, about 10 per cent are truck drivers and about 20 per cent are equipment operators, many of whom can be trained fairly quickly. In addition to the "on-site" workers, an approximately equal number of persons are needed for manufacturing and transporting supplies and for administrative purposes.

Needed—more machines

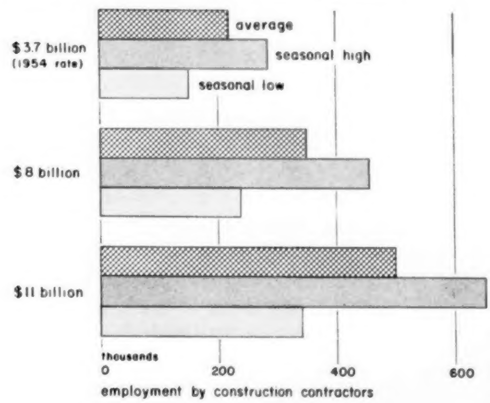
The huge bulldozers, power shovels, scrapers, graders and similar devices of today move earth about as cheaply as was possible 30 years ago even though most construction costs have more than doubled. Similarly, improved machines have kept the rise in unit paving costs to two-thirds more than the level of the 1920's. On a mileage basis, however, road costs have risen more than these indexes because potential savings have been absorbed by the desire for wider, thicker and straighter roads.

Contractors believe that they can achieve some expansion in capacity through fuller utilization of existing machines, but it is apparent that a large expansion in new construction would bring a flood of orders for this equipment. At the start of 1955, total road building machinery on hand numbered 312,000 units valued at about 3.6 billion dollars in addition to a truck fleet of 200,000 vehicles.

About $450,000,000 worth of equipment was purchased last year, mainly for replacement purposes. Industry sources indicate that an 11 billion dollar road program would require a 75 per cent rise in the total equipment inventory, even allowing for a substantial improvement in efficiency. A rapid acceleration in the building program could require outlays for this purpose in excess of a billion dollars per year. After achieving the higher level, equipment buying would temporarily drop back to a replacement basis.

Many of the types of equipment used in road building are purchased in quantity by other industries. It is apparent, therefore, that the impact upon the equipment industry will depend in part upon non-highway demand. At the present time, construction machinery builders are operating well below capacity. They indicate that they could increase over-all output by one-half in a matter of months, although

Estimated road employment for various levels of construction—strong seasonal pattern evident



some types of equipment output might lag behind needs.

The Midwest holds an important position in the manufacture of road building equipment. Particularly important in this area is the earth moving machinery, but trucks, batching plants, rock crushers and many necessary machine components also are produced here. Milwaukee, Chicago, Detroit, Peoria and a host of lesser centers will be the recipients of increased business as a result of any expanded highway program.

Cement, the key material

The backbone of the national road system is concrete; even bituminous surfaces often have an underlying bed of this material. The essential ingredient of concrete is, of course, cement.

About 20 per cent of the record 270 million barrels of cement produced last year went to highway use either direct or in the form of concrete pipe and other items. An 11 billion dollar highway spending rate would require over 160 million barrels of cement yearly. Obviously, a substantial rise in capacity would be necessary if non-highway use were not cut back sharply.

Memories of substantial overcapacity during the 1930's makes cement manufacturers reluctant to increase capital outlays substantially. New plants cost about 10 dollars per barrel of annual capacity, about three times the cost of many plants now in service. Nevertheless, a poll indicates that the industry will increase capacity to 338 million barrels by 1956 and 407 million by 1959, assuming a substantial rise in highway building. This expansion would provide ample volume if non-highway use remained at current levels. New installations recently have been announced for Chicago, Milwaukee and Buffington, Indiana.

Potential supplies of sand, gravel and crushed rock are enormous, but increasingly it has become necessary to tap less accessible, more costly deposits. Supplies of asphalt have tended to outrun use, and there is no question about sufficiency. Should shortages of cement hamper an expanded program, it would be possible, of course, to increase the proportion of bituminous surfacing.

Beneath the surface: steel

A variety of types of steel totaling about 1.6 million tons were used in highway building last year. About half of this amount consisted of structural steel in the form of beams, piles and plates. The rest was principally reinforcing bars, steel mesh and corrugated pipe.

Total steel needs even at an 11 billion dollar highway rate would amount to only 5.2 million tons of finished steel products or less than 6 per cent of current capacity. There is no immediate thought of a shortage of basic steel, but particular types might present problems.

Wide flange beams used in bridges and other large structures have been in tight supply. An additional 325,000 tons were recently added by a Chicago producer to an industry capacity of about 2.2 million, and other additions are in prospect. Highway use last year was 370,000 tons, and the highest yearly requirement contemplated would amount to 1,250,000 tons. In any case, other shapes can be substituted for the wide flange type in many structures at some sacrifice of economy or efficiency.

One of the small tonnage items—welded steel wire mesh—definitely will require capacity expansion. Only about 100,000 tons were used in road building in 1954, and capacity was ample for the purpose. But most of the total output of these products is used in highway work either as pavement reinforcing or in the production of concrete pipe or other items, and there is little possibility of diversion from other use.

It can be done

One hundred billion dollars spent on new roads at current prices would mean an investment one-third greater than the entire expenditure during the past 40 years. Nevertheless, analysis of the nation's physical ability to do the job indicates that, allowing for temporary shortages, such a program would be feasible. The questions before the Federal and local

governments, therefore, can be summed up as follows: Shall this program be given the necessary priority over alternative resource uses? And, second, would strong unstabilizing forces be generated as activity in the various supply industries expanded then contracted?

If near full employment continues, a rapidly accelerating road program could generate some inflationary pressure. Only about 2 per cent of the national product is involved, but expansion would be concentrated in specific segments of business and a heavy reliance on debt financing is contemplated. The true impact will depend importantly upon the vigor of construction activity in other lines. Slippage in total construction from record rates is widely expected, and it is possible that a stepped-up road program would use resources which would otherwise be idle. Highway outlays, however, would still need to be weighed against the need for schools and other facilities.

The Bureau of Public Roads has estimated that a cutback of one-third from the peak levels of highway building envisaged by the Clay group would be in order should the program be pushed through as suggested. However, in view of the skepticism voiced recently at both the national and state governmental levels, it is probable that the actual rate of expansion will be more modest than that set forth in the Clay reports. If so, the problems of acceleration and deceleration will be lessened. Nevertheless, the obvious need for better roads doubtless will bring further expansion in outlays with a resultant stimulus to the economy and particularly the supply industries.

The nation's highways

The highway network includes:

	Thousands of route miles		
	Total	Rural	Urban
Federal-aid routes			
Primary (state trunk roads)	234 ←	216 ←	18
Secondary ("farm-to-market")	483	483	—
Other roads and streets	2,650	2,314	336
Total	3,367	3,013	354

In this category is the 40,000-mile National System of Interstate Highways, which handles one-seventh of all vehicle travel.

The 1954 bill for roads and streets:

	billion dollars
Total outlay	6.4
Construction and land purchase	3.7 ←
Maintenance	1.7
Administration and policing	.4
Interest and debt repayment	.6

This is expected to run about a billion dollars more yearly, under present programs, between now and 1965, and it would average more than 10 billion annually under the Clay Committee plan.

The Clay Committee's highway proposals:

—Over the next 10 years, 25 billion dollars would be spent on the National System of Interstate Highways.

—This money would come mostly from borrowing; proceeds of existing Federal taxes on gasoline and motor oil are expected to provide enough for interest and repayment.

—State and local governments would be called upon to step up their construction spending to more than double their 1954 rate.

—These measures, taken altogether, would mean construction spending of 101 billion dollars in the next 10 years.

Uncle Sam's creditors

Safety, liquidity and variety of issues—these are the principal characteristics of the Government's IOU's, and it is because of these features that they have such a wide investor appeal. U. S. securities consequently have come to play an important role in the portfolios of almost every type of investor.

Three major groups—individuals, commercial banks and government trust and investment accounts—each own approximately one-fourth of the almost 280 billion dollars of outstanding U.S. securities. Together, their holdings of Government obligations amount to 198 billion; the other 81 billion are divided among a large number of smaller investor groups.

Individuals own 64 billion of the Federal debt, 50 billion of which are savings bonds held by some 18 million families. In the postwar period, the portfolios of personal trust funds have included an increasing share of the individually owned securities. They now account for 45 to 50 per cent of the 64 billion dollars of U.S. issues held by individuals.

At year-end, commercial bank holdings of Governments topped the 69 billion dollar mark. This past year banks regained the top spot—relinquished to individuals in 1948—as owners of the largest block of Treasury securities.

Federal, state and local government funds invested in U.S. issues represent mainly reserves accumulated in unemployment, retirement and veterans' life insurance programs. Federal trust funds own 77 per cent of the 64 billion held in these government accounts.

Among the smaller holders, nonfinancial corporations ended last year with 20 billion of Government obligations in their coffers. Insurance companies, mutual savings banks and savings and loan associations own over 25 billion, and the Federal Reserve Banks hold an additional 25 billion. The remaining 12 billion dollars of the Federal debt are held by such investors as nonprofit institutions, pension funds, security dealers and brokers, and foreign businessmen and central banks.

Interplay of forces

The pattern of debt ownership is continually changing in response to many forces. Most important among these are the state of business and the economic outlook, the prevailing and anticipated structure of interest rates, the private demands for investment funds and personal saving preferences.

The shifts in the ownership distribution over the past three years provide a vivid illustration of these forces at work—first in the period of economic expansion beginning in the spring of 1952 and second in the period of contraction that set in in mid-1953.

Some classes of investors made substantial adjustments in their portfolios as a result of fluctuations in economic activity. For other groups, however, the cyclical influences have only modified somewhat the longer-run trends. Some groups have continued to add to their holdings "through thick and thin," either because of legal requirements or the dictates of their financial requirements. Still others have been whittling down their large holdings accumulated during World War II.

Fluctuating portfolios

Commercial bank holdings of U. S. securities have shown the greatest volatility. They declined by 1.3 billion dollars in the 15 months of business expansion from April 1952 through June 1953 but rang up an 8.3 billion gain in the succeeding 15 month recessionary period. During each of these periods, the total U. S. debt rose by more than 3 per cent.

This difference in behavior of banks' portfolios of Governments in the two periods was due mainly to two factors: the slackening in the strong private demand for credit that characterized the boom period and the Federal Re-

serve policy of "active ease" that, in the second interval, was aimed at keeping the banks amply supplied with reserves to support loans and investments. In the initial period, credit demands from consumers, businesses and home buyers were all running at high levels. To accommodate such credit requests, banks supplemented other available funds by the sale of more than a billion dollars of Governments.

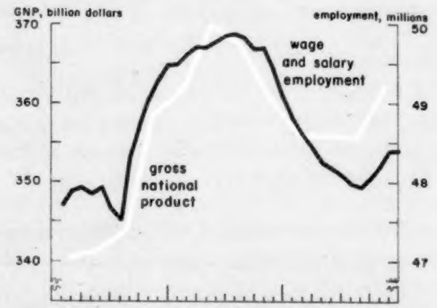
After mid-1953, however, the private demand for bank credit, particularly from consumers and businesses, began to slacken. Bank loans during the second period rose less than 2.2 billion dollars, compared with the 7.2 billion rise in the preceding 15 months. Meanwhile, the Federal Reserve System kept the banks well supplied with reserves in the interest of encouraging loan and investment expansion. The funds made available to banks from July 1953 through September 1954 permitted an expansion in bank earning assets of almost 13 billion dollars. The bulk of these added resources went for the purchase of U.S. securities.

Corporate portfolios also showed considerable fluctuation during this period. The major swings, however, resulted from the seasonal purchases and sales of Treasury bills and tax anticipation issues. A sharper than usual drop in corporate holdings in the spring of 1954 reflected also the reduced level of business activity and the lower yields available on Treasury bills (see chart). This encouraged some transfer of funds from short-term Governments to better-yielding time deposits and commercial paper. In addition, declining profits in 1954 and the expiration of the excess profits tax meant that tax liabilities were reduced, cutting the need to accrue highly liquid assets.

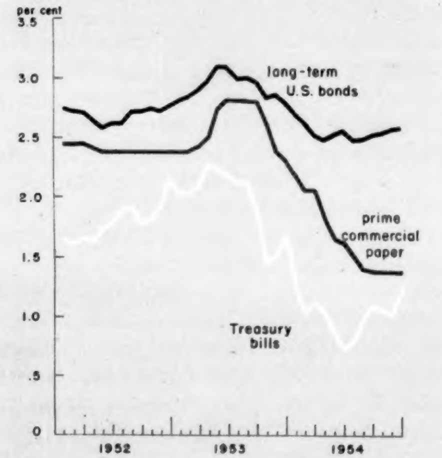
The third segment of the public debt to fluctuate in response to the shifting economic environment during the past three years has been *individuals' holdings* of marketable and convertible U.S. obligations. Personal ownership of these issues touched a postwar low of 15 billion dollars in mid-1952. But, as the yield on these Governments continued the rise begun in early 1952, individuals' holdings increased. By May 1953, the yield on long-term U. S. bonds had risen one-half percentage point above year-ago levels, and personal ownership of marketable Governments had increased by 2 billion dollars.

Around mid-1953, however, as the private demand for credit slackened and Federal Reserve action induced easier money market conditions, interest rates slumped. The yield on the longest-term marketable Treasury bond in the following 12 months declined over one-half of a percentage point to a level below the yield obtainable on savings bonds. Over the same months, individually owned U.S. securities

The changing economic climate over the past three years . . .



has been accompanied by substantial movements in interest rates



other than savings bonds had again dropped to 15 billion, the major part of the decline occurring in the last half of 1953. Personal holdings fell an additional billion dollars in the third quarter of 1954, despite the mild rise in yields on marketable Government securities since last July. This probably reflects in part the need of individuals to dig into their liquid assets as the recession continued. The decline may also have been accentuated by a shift from debt issues into equity securities in response to the rise that has taken place in the stock market.

Steady buyers

Individuals' holdings of savings bonds, on the other hand, have slowly edged up throughout most of the past three years. Yet this steady expansion is the product of quite disparate movements by different groups of holders.[1] Sales to large investors—200 dollar denominations and up—registered substantial gains in 1953 and 1954, while cash-ins of these bonds have declined or increased slightly. For small bonds, sales showed a small increase this past year while redemptions rose sharply.

The increased activity in large savings bonds reflects the decline in yields on marketable securities since mid-1953 and the boost in 1952 of maximum permissible annual purchases from $10,000 to $20,000. Rate-conscious big investors turned increasingly to savings bonds as the yield on marketable securities—both Government and corporate—declined. In early 1954 the yield on Aaa corporates dropped below 3 per cent, the return on savings bonds.

The automatic accrual of interest on outstanding savings bonds is also an important factor in the rise in current redemption value of the bonds. As a result of this process, interest on savings bonds is at present being "silently borrowed" at the rate of 1.2 billion per year.

The most consistent gains in security holdings have been registered by the *government trust and investment accounts.* Unlike other investors, these funds are usually required to confine their investment to Government securities. Yet here again, the steady trend in the totals masks some divergent movements.

While the rate of growth of state and local funds has continued to climb, the growth in the Federal trust funds has slowed down since mid-1953. From April 1952 through June 1953 the amount of Government debt held by U.S. funds increased 4.6 billion, but it gained only 1.8 billion in the following 15 months. This reflects a step-up in expenditures rather than a decline in receipts. Outlays from the Unemployment Trust Fund rose by 1.0 billion as business contracted and the number of people unemployed increased. This together with the normal increase in social security payments account for most of the reduction in the rate of Government security purchases.

State and local funds, on the other hand, are less sensitive to changing business conditions. These accounts consist mainly of reserves accumulated in retirement programs and the temporary investment of funds obtained from long-term financing.

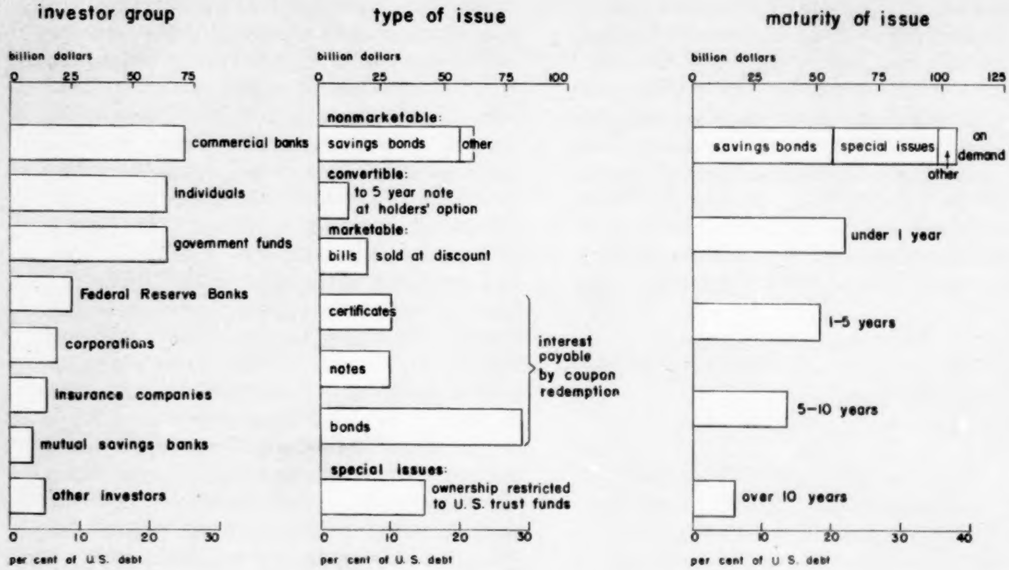
Steady sellers

Insurance companies and mutual savings banks have been paring their portfolios of Government securities with few interruptions since the early postwar period. During the War, with other suitable investment opportunities lacking, they built their Government holdings up to a high level. But the postwar period brought a mushrooming private demand for investment funds mainly for business expansion and residential construction. Moreover, the private borrowers offered appreciably higher rates than were obtainable on Governments. In response, these institutions made a substantial shift in their asset ratios.

The ratio of Governments to total assets for life insurance companies at mid-1953 was 13 per cent; at the end of the War it was 46 per cent. For mutual savings banks the comparable ratios were 34 and 63 per cent. In the last half of 1953 and in 1954 the rate of decline in their holdings of Governments has increased as the drop in rates on Governments has made mortgage loans increasingly attractive and the boom

[1] For a more detailed review of the savings bond program since mid-1953 see the February 1955 issue of *Business Conditions.*

The wide appeal of Governments is due, in part, to the variety of issues offered investors



U. S. debt as of december 31, 1954

in home construction has swelled the demand for mortgage funds.

Insurance companies and mutual savings banks have traditionally held a large part of their assets in private long-term debt, mortgages in particular. This postwar shift in asset distribution thus represents a return to their prewar pattern of investments.

A factor in the environment

The one remaining important holder of the Federal debt, except for the miscellaneous category, is the *Federal Reserve System*. The System plays a unique role as an investor in Government securities. Changes in its portfolio are made, not as a result of profit or legal considerations as in the case of the other holders, but as a means of carrying out the System's monetary policy. Its purchases and sales of Governments are undertaken to ease or tighten the credit markets in response to changes in business activity. As a result, on a short-term basis, System holdings fluctuate considerably.

Over a longer-run period, however, open market operations may reflect the increasing credit requirements of an expanding economy. The purchase of U. S. issues is one of the means by which the Federal Reserve System can provide commercial banks with the additional reserve funds necessary to support the nation's continued growth. Thus, its portfolio may be expected to expand over the years.

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